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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,933	06/11/2001	Martin Majolo	H 3757 PCT/U	1195
423	7590	12/04/2003	EXAMINER	
HENKEL CORPORATION THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. GULPH MILLS, PA 19406			YOON, TAE H	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/857,933	MAJOLO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tae H Yoon	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2002.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,12-15 and 17-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,13-15,17,18,25-28,30,31,37 and 38 is/are rejected.
- 7) ☒ Claim(s) 12, 19-24, 29, 32-36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

Claim 12 is objected since correction of "ther of" at the end of claim 12 to "thereof" is needed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited average molecular weight in claim 25 is indefinite in not specifying a particular average molecular weight such as number average molecular weight or weight average molecular weight.

Applicant asserts that the MW of polyoxyalkylene polyol is shown as a number average molecular weight unless otherwise stated and is determined by end (hydroxyl) group analysis. Additional papers submitted by applicant show said end (hydroxyl) group analysis. However, the instant specification is silent as to said end (hydroxyl) group analysis and there is no universal rule to use said end (hydroxyl) group analysis for polymers having hydroxyl end groups. In fact, any method can be used in measuring various average molecular weights as evidenced by the attached copy (pages 32-33) of Polymer Science Dictionary, 2<sup>nd</sup> edition by Mark Alger, 1989. Also, contrary to applicant's statement, the attached copy of the catalog of Aldrich Chemical Company (1988) shows polyoxyalkylene polyol with a weight average molecular weight (M.W.). The polyoxyalkylene polyols of Aldrich Chemical Company seem to be appeared in table 8 of the submitted Encyclopedia of Poly. Sci. & Eng. Thus, said table 8 shows a weight average molecular weight, not a number average molecular weight

suggested by applicant since applicant states that the MW of polyoxyalkylene polyol is shown as a number average molecular weight unless otherwise stated. See table 2 of the art of record US 5,162,420 showing different average molecular weights, and Ex parte Simpson, 61 USPQ2d 1009 (BPAI 2001).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,13, 17, 18, 26-28, 30, 31, 37 and 38 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gamon et al (US 4,816,506).

Gamon et al teach an aqueous dispersion comprising polydiorganosiloxanes having hydroxyl groups in the terminal units which meet the instant polymer having at least one terminal group and an emulsifier at col. 6, lines 15-24. Employing other additives and an acid pH such as pH 5 are taught in abstract and at col. 5. Emulsion (A)(1) at col. 6, lines 15-25 contains more than 60 wt.% of polydiorganosiloxanes having

hydroxyl groups in the terminal units, and example 3 teaches a silicone resin and a solid polymer content of over 60 % by weight. Thus, the instant invention lacks novelty.

Claims 17, 37 and 38 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gaa et al (US 4,567,228).

Rejection is maintained for reason of record and following response.

The instant claims do not require at least 60% by weight of a polymer having at least one terminal group contrary to applicant's assertion. The term "pendant and lateral" encompasses terminal groups as taught by Gaa et al, col. 6, lines 39-40.

Claims 13-15, 17, 37 and 38 are rejected under 35 U.S.C. 103(a) as obvious over Gaa et al (US 4,567,228).

Rejection is maintained for reason of record and following response.

The instant claims do not require at least 60% by weight of a polymer having at least one terminal group contrary to applicant's assertion. The term "pendant and lateral" encompasses terminal groups as taught by Gaa et al, col. 6, lines 39-40. Gaa et al also teach employing emulsifiers if needed at col. 12, lines 46-47, and other film-forming resins at col.24, lines 36-47. The polymer contents shown in table1 are less than 60% as pointed out applicant, however, Gaa et al teach an adjustment of the solid content at col. 28, lines 62-64.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to obtain an aqueous dispersion having a solid polymer content of 60% by weight comprising a polymer having at least one terminal group, a film-forming resin and an emulsifier in Gaa et al since Gaa et al teach such modification as discussed above absent showing otherwise.

Claim 17 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Vogt-Birnbrich et al (US 5,760,123).

Rejection is maintained for reason of record and following response. Vogt-Birnbrich et al teach a small quantity of HOSi groups at col. 3, lines 29-30 which meets the invention.

Claims 13-15 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chang et al (US 5,162,420).

Rejection is maintained for reason of record and following response.

Chang et al teach a total organic resin solids content of greater than at least 50% by weight and employing any compatible resin at col. 6, lines 8-47 which meets the invention. Polymers of examples contain at least some terminal silanol groups since a random polymerization is taught.

Claims 12, 19-24, 29 and 32-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat 6,313,335 teaches an aqueous dispersion of silane-terminated polyurethane and polyether throughout the patent (see col. 8, lines 10-36). Said dispersion has solids content of 3 to about 60 wt% (col. 11, lines 61-64), but it also contains other solid components since such practice is taught at col. 8, lines 10-36.

Therefore, the instant aqueous dispersion comprising at least 60% by weight of a silane-terminated polymer would not be obvious to one skilled in the art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone

Application/Control Number: 09/857,933

Page 7

Art Unit: 1714

number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tae H Yoon  
Primary Examiner  
Art Unit 1714

THY/December 1, 2003